

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

Claim 1 (original) An AGC circuit comprising a detection circuit that detects a high frequency reception signal and outputs a detection signal including a pulsating component, and controlling a gain of an amplification circuit amplifying the high frequency reception signal according to a detection output of the detection circuit, wherein:

a high frequency property of an amplifier that is connected immediately after the detection circuit is deteriorated; or

a unit for deteriorating the high frequency property is connected to the amplifier.

Claim 2 (original) The AGC circuit according to claim 1, wherein the amplifier whose high frequency property is deteriorated is configured in such a way that a channel length and a channel width in each MOSFET that configures the amplifier are set large up to a degree that the high frequency property of the amplifier deteriorates.

Claim 3 (original) The AGC circuit according to claim 1, wherein the unit for deteriorating the high frequency property is a capacitor with large capacity that is connected between an output terminal of the amplifier and ground.

Claim 4 (original) The AGC circuit according to claim 1, wherein:  
the unit deteriorating the high frequency property is a smoothing circuit comprising:

a capacitor;

a voltage comparison circuit for comparing a terminal voltage with an input voltage of the capacitor;

a charge circuit for charging the capacitor at intervals in a case where the input voltage is relatively higher than the terminal voltage; and

a discharge circuit for discharging a discharge current at intervals from the capacitor in a case where the terminal voltage is relatively lower than the input voltage;  
and

the smoothing circuit is connected to an output terminal of the amplifier.

Claim 5 (original) The AGC circuit according to claim 1, wherein the amplifier whose high frequency property is deteriorated is configured to increase a wiring capacity up to a degree that the high frequency property of the amplifier deteriorates by arranging respective MOSFETs that configure the amplifier in such a way that wirings among the MOSFETS are crossed with each other.

6. (currently amended) The AGC circuit according to [one of] claim[s] 1 [to 5], wherein

deterioration of the high frequency property is deteriorating by an amount equal to or greater than 3dB in a frequency of the pulsating component.